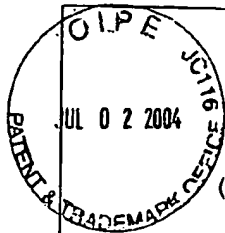


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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Form PTO-1449 (Modified)  
(Use several sheets if necessary)

## COMPLETE IF KNOWN

Application Number	09/920,903
Confirmation Number	8061
Filing Date	August 3, 2001
First Named Inventor	Brian G. Agee
Group Art Unit	2631
Examiner Name	
Attorney Docket No.	101948023US21

Sheet 1 of 1

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	U.S. Patent or Application		Name of Patentee or Inventor of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		NUMBER	Kind Code (if known)			
llt		4,383,332		Glance et al.	05/10/1983	

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent or Application			Name of Patentee or Applicant of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	NUMBER	Kind Code (if known)				

## OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS

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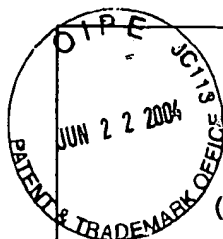
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		NUMBER	Kind Code (if known)			
llk		5,613,219		Vogel et al.	03/18/1997	
llk		5,924,034		Dupuy	07/13/1999	

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**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No.	Foreign Patent or Application			Name of Patentee or Applicant of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
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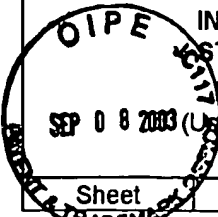
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		NUMBER	Kind Code (if known)			
llt		3,522,540		Lee	08/04/1970	
llt		3,633,107		Brady	01/04/1972	
llt		3,971,988		Denenberg	07/27/1976	
llt		4,249,181		Lee	02/03/1981	
llt		4,381,562		Acampora	04/26/1983	
llt		4,412,350		Miedema	10/25/1983	
llt		4,510,595		Glance et al.	04/09/1985	
llt		4,723,321		Saleh	02/02/1988	
llt		4,726,040		Acampora	02/16/1988	
llt		4,789,983		Acampora et al.	12/06/1988	
llt		4,807,253		Hagenauer et al.	02/21/1989	
llt		4,835,517		van der Gracht et al.	05/30/1989	
llt		4,914,676		Iwamatsu et al.	04/03/1990	
llt		5,029,185		Wei	07/02/1991	
llt		5,048,057		Saleh et al.	09/10/1991	
llt		5,056,112		Wei	11/08/1991	
llt		5,088,113		Wei	02/11/1992	
llt		5,177,765		Holland et al.	01/05/1993	
llt		5,274,384		Hussain et al.	12/28/1993	
llt		5,289,464		Wang	02/22/1994	
llt		5,295,138		Greenberg et al.	03/15/1994	
llt		5,295,152		Gudmundson et al.	03/15/1994	
llt		5,302,914		Arntz et al.	04/12/1994	
llt		5,305,353		Weerackody	04/19/1994	
llt		5,361,397		Wright	11/01/1994	
llt		5,363,375		Chuang et al.	11/08/1994	

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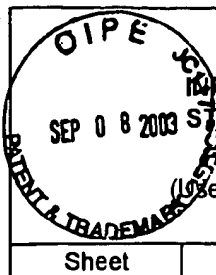
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				First Named Inventor	Brian G. Agee
				Group Art Unit	2631
Examiner Name					
Sheet	2	of	5	Attorney Docket No.	101948023US21

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		NUMBER	Kind Code (if known)			
llk		5,367,539		Copley	11/22/1994	
llk		5,394,435		Weerackody	02/28/1995	
llk		5,400,322		Hunt et al.	03/21/1995	
llk		5,410,740		Hagstrom	04/25/1995	
llk		5,438,329		Gastouniotis et al.	08/01/1995	
llk		5,463,656		Polivka et al.	10/31/1995	
llk		5,509,015		Tiedemann, Jr. et al.	04/16/1996	
llk		5,570,349		Bustamante et al.	10/29/1996	
llk		5,613,211		Matsuno	03/18/1997	
llk		5,654,955		Natali	08/05/1997	
llk		5,657,313		Takahashi et al.	08/12/1997	
llk		5,657,355		Reusens	08/12/1997	
llk		5,661,780		Yamamoto et al.	08/26/1997	
llk		5,689,502		Scott	11/18/1997	
llk		5,694,388		Sawahashi et al.	12/02/1997	
llk		5,732,068		Takahashi et al.	03/24/1998	
llk		5,732,113		Schmidl et al.	03/24/1998	
llk		5,734,647		Yoshida et al.	03/31/1998	
llk		5,745,860		Kallin	04/28/1998	
llk		5,752,168		Monot et al.	05/12/1998	
llk		5,752,202		Obright	05/12/1998	
llk		5,799,000		Hoole	08/25/1998	
llk		5,802,044		Baum et al.	09/01/1998	
llk		5,864,543		Hoole	01/26/1999	
llk		5,875,208		Hoole	02/23/1999	
llk		5,907,577		Hoole	05/25/1999	


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				Application Number	09/920,903
				Confirmation Number	8061
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				First Named Inventor	Brian G. Agee
				Group Art Unit	2631
Examiner Name					
Sheet	3	of	5	Attorney Docket No.	101948023US21

U.S. PATENT DOCUMENTS						
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		NUMBER	Kind Code (if known)			
llt		5,914,981		Veintimilla	06/22/1999	
llt		5,943,375		Veintimilla	08/24/1999	
llt		5,987,338		Gibbons et al.	11/16/1999	
llt		6,047,200		Gibbons et al.	04/04/2000	
llt		6,064,338		Kobayakawa et al.	05/16/2000	
llt		6,073,032		Keskitalo et al.	06/06/2000	
llt		6,081,566		Molnar et al.	06/27/2000	
llt		6,084,932		Veintimilla	07/04/2000	
llt		6,085,114		Gibbons et al.	07/04/2000	
llt		6,128,276		Agee	10/03/2000	
llt		6,131,016		Greenstein et al.	10/10/2000	
llt		6,175,555		Hoole	01/16/2001	
llt		6,198,719	B1	Faruque et al.	03/06/2001	
llt		6,215,777	B1	Chen et al.	04/10/2001	
llt		6,216,019	B1	Gibbons et al.	04/10/2001	
llt		6,347,236	B1	Gibbons et al.	02/12/2002	
llt		6,408,016	B1	Zhang	06/18/2002	
llt		6,442,222	B1	Ghazi-Moghadam et al.	08/27/2002	
llt		6,480,522	B1	Hoole et al.	11/12/2002	
llt		6,487,235	B2	Hoole	11/26/2002	
llt		6,501,771	B2	Hoole	12/31/2002	
llt		6,510,182	B1	Lee et al.	01/21/2003	
llt		6,519,278	B1	Hiramatsu	02/11/2003	
llt		6,560,209	B1	Alamouti et al.	05/06/2003	
llt		6,584,144	B2	Alamouti et al.	06/24/2003	
llt		6,600,776	B1	Alamouti et al.	07/29/2003	


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EXAMINER <b>KHAI TRAN</b>	DATE CONSIDERED <b>6/9/05</b>
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6 OF 13

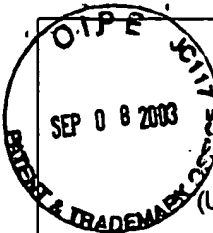
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				Group Art Unit	2631
Examiner Name					
Sheet	4	of	5	Attorney Docket No.	101948023US21

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		NUMBER	Kind Code (if known)			
llt		US 2002/0034217; atty. docket no. 101948046US3	A1	Zhang	Pub. Date 03/21/2002	
llt		US 2003/0053488; atty docket no. 101948027US5	A1	Hoole	Pub. Date 03/20/2003	
llt		U.S. Application No. 10/435,304; atty. docket no. 101948025US6		Alamouti et al.	Filed 05/08/2003	<b>RECEIVED</b> SEP 10 2003 Technology Center 2600
llt		US 2003/0156570; atty. docket no. 101948031US2	A1	Alamouti et al.	Pub. Date 08/21/2003	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.	Foreign Patent or Application			Name of Patentee or Applicant of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	NUMBER	Kind Code (if known)				
llt		EP	0 490 509	B1	Northern Telecom Ltd.	06/17/1992		
llt		WO	94/13077	A1	Thomson-CSF	06/09/1994		
llt		WO	94/19877	A1	Telefonaktiebolaget LM Ericsson	09/01/1994		
llt		EP	0 637 181	B1	Siemens Aktiengesellschaft	02/01/1995		
llt		EP	0 639 035	A1	Northern Telecom Limited.	02/15/1995		
llt		EP	0 641 096	A1	France Telecom; Telediffusion de France	03/01/1995		
llt		WO	95/09512	A1	Nokia Telecommunications OY	04/06/1995		
llt		WO	95/10144	A1	Telia AB	04/13/1995		
llt		EP	0 653 859	A1	GPT Limited	05/17/1995		
llt		EP	0 653 973	B1	Robert Bosch GMBH	05/24/1995		
llt		WO	95/32595	A1	Iris Systems	11/30/1995		

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		Office	NUMBER	Kind Code (if known)				
llt		EP	0 685 973	A2	AT&T Corp.	12/06/1995		
llt		EP	0 690 593	A2	Mitsubishi Denki Kabushiki	01/03/1996		
llt		WO	96/09731	A1	Accessline Technologies	03/28/1996		
llt		WO	96/36136	A1	Ericsson Inc.	11/14/1996		
llt		WO	97/01256	A1	Telefonaktiebolaget LM Ericsson	01/09/1997	RECEIVED  SEP 10 2003	
llt		WO	97/02665	A	Interdigital Technology Corporation	01/23/1997		
llt		WO	98/35463	A2	AT&T Wireless Services, Inc.	08/13/1998		
llt		WO	98/37638	A3	AT&T Wireless Services, Inc.	08/27/1998	Technology Center 2600	
llt		CA	2,278,852		AT&T Wireless Services, Inc.	08/13/1998		

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OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS			
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llt		CHAN et al., "Efficient Frequency Assignments Scheme for Intermodulation Distortion Reduction in Fiber-Optic Microcellular Systems," Electronic Letters, October 27, 1994, pp. 1831-1832, Vol. 30, No. 22, IEEE, Stevenage, UK	
llt		GINER, V.C., "An Approximate Analysis of TDMA Out-of-Slot Random Access Protocols for Microcellular Mobile Communications," Int'l Journal of Wireless Information Networks, January 1996, pp. 41-53, Vol. 3 no. 1, XP002077581	
llt		OJANPERA et al., "Frames-Hybrid Multiple Access Technology," 1996 IEEE 4 <sup>th</sup> Int'l Symposium on Spread Spectrum Techniques, 22-25 September. 1996, Vol. 1, pp. 320-324	
llt		ROHLING H. et al., "Performance of an OFDM-TDMA Mobile Communication System," 1996 IEEE 46 <sup>th</sup> Vehicular Technology Conference 46, Apr. 28-May 1, 1996, vol. 3 no. 46, pp. 1589-1593, Atlanta XP000595799	
llt		VANDENDORPE, L. et al., "Analysis of Residual Interference After MSE Linear Equalization of Multitone Spread Spectrum Signals," Communications-Gateway to Globalization, Proceedings of the Conference on Communications, Seattle, June 18-22, 1995, Vol. 3, pp. 1673-1677, XP000535041	
llt		VANDENDORPE, L. et al., "Performance Analysis of Linear Joint Multiple Access Interference Cancellation-Equalization for Asynchronous Multitone CDMA," IEEE, September 25, 1995, pp. 537-541, XP000610292	

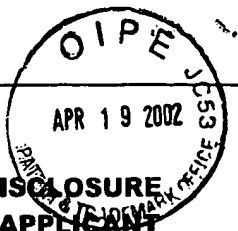
EXAMINER <i>KHAN TRAN</i>	DATE CONSIDERED <i>6/2/05</i>
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PTO/SB/08A

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE



Substitute for form 1449A/PTO

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llt	AA	5,054,035		Tarallo et al.	10/11/91	
llt	AB	5,515,378		Roy III et al.	5/7/96	
llt	AC	5,541,954		Emi	7/30/96	
llt	AD	5,598,428		Sato	1/28/97	
llt	AE	6,160,839		Zhang	12/12/00	
llt	AF	6,359,923		Agee et al.	3/19/02	
	AG					
	AH					
	AI					

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**FOREIGN PATENT DOCUMENTS**

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	AK							
	AL							
	AM							

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llt	AN	CIMINI, Jr. LEONARD J., "Analysis and Simulation of a Digital Mobile Channel Using Orthogonal Frequency Division Multiplexing," July 1985, IEEE Transactions on Communications, Vol. Comm. 33, No. 7, pp. 665-675, IEEE, New York	
llt	AO	RAPPAPORT et al., editors, "Wireless Personal Communications: Trends and Challenges," 1994, Chapter 7, PP. 69-80, Kluwer Academic Publishers, Boston/Dordrecht/London	
llt	AP	JUNG P. et al., "On Multicarrier CDMA Mobile Radio Systems with Joint Detection and Coherent Receiver Antenna Diversity, 1996 5 <sup>th</sup> IEEE International Conference on Universal Personal Communications," Vol. 1, September 1996, pp. 61-65, IEEE, New York	

EXAMINER

KHAI TRAN

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Page 1 of 5

<b>FORM PTO-1449</b>  <b>INFORMATION DISCLOSURE CITATION</b>				Attorney Docket: 4271-4036US3		Serial No.: Cont. of 08/993,721	
				Applicant: Agee et al.			
				Filing Date: 08/03/01		Group Art Unit: Unassigned	

U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date
llt	AA	5,504,775	04/02/96	Chouly et al.			
llt	AB	5,896,425	04/1999	Hirano et al.			
llt	AC	5,923,700	07/1999	Zhang			
llt	AD	5,933,421	08/1999	Alamouti et al.			
llt	AE	5,999,569	12/1999	Oshima			
llt	AF	5,414,699	05/09/95	Lee			
llt	AG	5,490,174	02/06/96	Shin et al.			
llt	AH	5,278,892	01/11/94	Bolliger et al.			
llt	AI	3,745,464	07/10/73	Lee			
llt	AJ	4,827,499	05/02/89	Warty et al.			
llt	AK	5,305,308	04/19/94	English et al.			

FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Sub-Class	Translation
llt	AL	WO 97/5709A	02/13/97	WIPO			<input type="checkbox"/> Yes <input type="checkbox"/> No
llt	AM	WO 96/22662A	07/25/96	WIPO			<input type="checkbox"/> Yes <input type="checkbox"/> No
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llt	AO	0 582 537A	02/09/94	EPO			<input type="checkbox"/> Yes <input type="checkbox"/> No
llt	AP	WO 96/31009A	10/03/96	WIPO			<input type="checkbox"/> Yes <input type="checkbox"/> No

OTHER DOCUMENTS (Including Author, Title, Date, etc.)		
	AR	
	AS	
	AT	

Examiner: <i>KHAT TRAN</i>	Date Considered: <i>6/10/05</i>
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609.  
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 09/920903  
 08/03/01

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<b>FORM PTO-1449</b>  <b>INFORMATION DISCLOSURE CITATION</b>				Attorney Docket: 4271-4036US3		Serial No.: Cont. of 08/993,721	
				Applicant: Agee et al.			
				Filing Date: 08/03/01		Group Art Unit: Unassigned	
<b>U.S. PATENT DOCUMENTS</b>							
Examiner Initial		Document Number	Date	Name	Class	Sub- Class	Filing Date
<i>RLK</i>	AA	5,084,869	01/28/92	Russell			
<i>RLK</i>	AB	5,226,071	07/06/93	Bolliger et al.			
<i>RLK</i>	AC	4,495,648	01/22/85	Giger			
<i>RLK</i>	AD	5,136,612	08/04/92	Bi			
<i>RLK</i>	AE	4,644,562	02/17/87	Kavehrad			
<i>RLK</i>	AF	5,515,378	05/07/96	Roy III et al.			
<i>RLK</i>	AG	4,488,445	12/18/84	Aske			
<i>RLK</i>	AH	5,410,538	04/25/95	Roche et al.			
<i>RLK</i>	AI	5,260,967	11/09/93	Schilling			
<i>RLK</i>	AJ	5,291,475	03/01/94	Bruckert			
<i>RLK</i>	AK	5,319,634	06/07/94	Bartholomew			
<b>FOREIGN PATENT DOCUMENTS</b>							
		Document Number	Date	Country	Class	Sub- Class	Translation
<i>RLK</i>	AL	0 696 856A	02/14/96	EPO			<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>RLK</i>	AM	0 668 664A	08/23/95	EPO			<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>RLK</i>	AN	WO 94/05094A	03/03/94	WIPO			<input type="checkbox"/> Yes <input type="checkbox"/> No
	AO						<input type="checkbox"/> Yes <input type="checkbox"/> No
	AP						<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>OTHER DOCUMENTS (Including Author, Title, Date, etc.)</b>							
	AR						
	AS						
	AT						
Examiner <i>KHAI TRAN</i>		Date Considered <i>6/2/05</i>					
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<b>U.S. PATENT DOCUMENTS</b>							
Examiner Initial		Document Number	Date	Name	Class	Sub- Class	Filing Date
<i>llt</i>	AA	5,319,634	06/07/94	Bruckert			
<i>llt</i>	AB	4,383,332	05/10/83	Glance et al.			
<i>llt</i>	AC	5,260,968	11/09/93	Gardner et al.			
<i>llt</i>	AD	5,481,570	01/02/96	Winters			
<i>llt</i>	AE	5,933,478	08/03/99	Ozaki et al.			
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
<b>FOREIGN PATENT DOCUMENTS</b>							
	AL						
	AM						
	AN						
	AO						
	AP						
<b>OTHER DOCUMENTS (Including Author, Title, Date, etc.)</b>							
<i>llt</i>	1	Theodore S. Rappaport, "Multiple Access Techniques for Wireless Communications," WIRELESS COMMUNICATIONS: PRINCIPLES AND PRACTICE, 1996 Prentice Hall, Chapter 8, pp. 395-410.					
<i>llt</i>	2	Litva et al., "Fundamentals of Digital Beamforming", DIGITAL BEAMFORMING IN WIRELESS COMMUNICATIONS, 1996 Artech House, Inc., Chapter 2, pp. 13-57.					
<i>llt</i>	3	Ramjee Prasad, "CDMA System Concepts", CDMA FOR WIRELESS PERSONAL COMMUNICATIONS, 1996 Artech House, Inc., Chapter 3, pp. 39-61.					
<i>llt</i>	4	Swales et al., IEEE Trans. Veh. Technol. Vol. 39, No. 1, February 1990					
<i>llt</i>	5	Chang, Bell Sys. Tech. Jour., Vol. 45, pp. 1775-1796, Dec. 1966					

Examiner <i>KHAI TRAN</i>	Date Considered <i>8/1/05</i>
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		Applicant: Agee et al.	
		Filing Date: 08/03/01	Group Art Unit: Unassigned
llt	6	Weinstein and Ebert, IEEE Trans. on Comm. Tech., Vol. com-19, No. 5, Oct. 1971, page 628.	
llt	7	"Multicarrier CDMA in indoor wireless radio networks," <i>Proc. PIMRC '93</i> , Yokohama, Japan, pp. 109-113, September 1993.	
llt	8	Davies et al., in A.T.R., Vol. 22, No. 1, 1988.	
llt	9	Telecom Australia, Rev. Activities, 1985/1986, pp. 41-43.	
llt	10	"Wireless personal Communications: Trends and Challenges", Rappaport, Woerner and Reed, editors, Kluwer Academic Publishers, 1994, pp. 69-80.	
llt	11	Proc. Virginia Tech. Third Symposium on Wireless Personal Communications, June 1993, pp. 15-1 to 15-12.	
llt	12	Fazel, "Narrow-Band Interference Rejection in Orthogonal Multi-Carrier Spread Spectrum Communications", Record, 1994, Third Annual International Conference on Universal Personal Communications, IEEE, 1994, pp. 46-50.	
llt	13	N. Yee, Jean-Paul M.G. Linnarta, G. Fettweis, "Multi-Carrier CDMA in Indoor Wireless Radio Networks", <i>IEICE Transactions on Communications</i> , Vol. E77-B, No. 7 pp. 900-904, July 1994.	
llt	14	L. Vandendorpe, " <u>Multitone Spread Spectrum Multiple Access Communications System in a Multipath Rician Fading Channel</u> ", <i>IEEE Transactions on Vehicular Technology</i> , Vol. 44 No.2, pp.327-337, May 1995.	
llt	15	L. Vandendorpe, " <u>Multitone Direct Sequence CDMA System in an Indoor Wireless Environment</u> ", <i>IEEE First Symposium on Communications and Vehicular Technology</i> , Benelux Delft Netherlands, pp.4.1-1 to 4.1-8, October 27-28- 1993.	
llt	16	K. Fazel, " <u>Performance of CDMA/OFDM for Mobile Communication System</u> ", <i>2nd IEEE International Conference on Universal Personal Communications</i> , Ottawa, Ontario, pp.975-979, October 12-15, 1993.	
llt	17	G. Tsoulos, et al. " <u>Adaptive Antennas for third generation DS-CDMA cellular systems</u> ", <i>Proc. IEEE VTC'95</i> , pp.45-49, Aug. 1995.	
llt	18	Y. Wang et al., " <u>Adaptive antenna arrays for cellular CDMA communication systems</u> ", <i>Proc. IEEE Intl. Conf. Acoustics, Speech and Signal Processing</i> , Detroit, pp. 1725-1728, 1995.	
llt	19	B. Quach, et al, " <u>Hopfield network approach to beamforming in spread spectrum communications</u> ", <i>IEEE Proc. Seventh SP Workshop on Statistical Signal and Array Processing</i> , pp. 409-412, June 1994.	

Examiner	KHAI TRAN	Date Considered	5/1/00
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		Applicant: Agee et al.	
		Filing Date: 08/03/01	Group Art Unit: Unassigned
llt	20	A. Sandhu, et al. " <u>A Hopfield neurobeamformer for spread spectrum communications</u> ", <i>Sixth IEEE Int. Symposium on Personal, Indoor and Mobile Radio Communications</i> , Sept. 1995	
llt	21	A. F. Naguib, et al. " <u>Performance of CDMA cellular networks with base-station antenna arrays</u> ", in C. G. Gunther, ed. " <i>Mobile Communications - Advanced systems and components</i> ", Springer-Verlag, pp. 87-100, March 1994.	
llt	22	V. Ghazi-Moghadam, et al, " <u>Interference cancellation using adaptive antennas</u> ", <i>Sixth IEEE Int. Symposium on Personal, Indoor and Mobile Radio Communications</i> , pages 936-939, Sept. 1995.	
llt	23	H. Iwai, et al. " <u>An investigation of space-path hybrid diversity scheme for base station reception in CDMA mobile radio</u> ", <i>IEEE J.Sel.Areas, Comm.</i> , vol.SAC-12, pp.962-969, June 1994.	
llt	24	R. Kohno, et al. " <u>A spatially and temporally optimal multi-user receiver using an array antenna for DS/CDMA</u> ", <i>Sixth IEEE Int. Symposium on Personal, Indoor and Mobile Radio Communications</i> , Toronto, pages 950-954, Sept. 1995.	

Examiner	KHAI TRAN	Date Considered	6/9/05
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